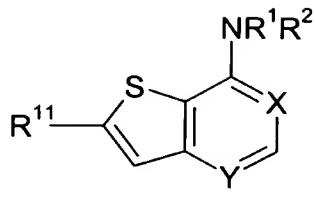


5 What is claimed:

1. A compound of the formula of formula 1



1

or a pharmaceutically acceptable salt, prodrug or hydrate thereof,

X is N, CH or C(CN);

Y is N, CH, CF, or N→O;

R¹ is H or C<sub>1</sub>-C<sub>6</sub> alkyl;

R² is 5 to 13 membered heterocyclic, wherein said R² group is optionally substituted by 1 to 5 R⁵ substituents,

each R⁵ is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl,

-C(O)R⁸, -NR⁶C(O)R⁷, -C(O)NR⁶R⁷, -NR⁶R⁷, -OR⁹, -SO<sub>2</sub>NR⁶R⁷, -SO<sub>2</sub>R⁶, -NR⁶SO<sub>2</sub>R⁷, -NR⁶SO<sub>2</sub>NR⁹R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, -(CH<sub>2</sub>)<sub>j</sub>O(CH<sub>2</sub>)<sub>q</sub>NR⁶R⁷, -(CH<sub>2</sub>)<sub>j</sub>O(CH<sub>2</sub>)<sub>q</sub>OR⁹, -(CH<sub>2</sub>)<sub>j</sub>OR⁹, -S(O)<sub>j</sub>(C<sub>1</sub>-C<sub>6</sub> alkyl), -(CH<sub>2</sub>)<sub>j</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>j</sub>O(CH<sub>2</sub>)<sub>q</sub>(5 to 10 membered heterocyclic), -C(O)(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>j</sub>NR⁷(CH<sub>2</sub>)<sub>q</sub>NR⁶R⁷, -(CH<sub>2</sub>)<sub>j</sub>NR⁷CH<sub>2</sub>C(O)NR⁶R⁷,

-(CH<sub>2</sub>)<sub>j</sub>NR⁷(CH<sub>2</sub>)<sub>q</sub>NR⁹C(O)R⁸, -(CH<sub>2</sub>)<sub>j</sub>NR⁷(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>q</sub>OR⁹, -(CH<sub>2</sub>)<sub>j</sub>NR⁷(CH<sub>2</sub>)<sub>q</sub>S(O)<sub>j</sub>(C<sub>1</sub>-C<sub>6</sub> alkyl), -(CH<sub>2</sub>)<sub>j</sub>NR⁷(CH<sub>2</sub>)<sub>q</sub>R⁶, -SO<sub>2</sub>(CH<sub>2</sub>)<sub>j</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), and -SO<sub>2</sub>(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the -(CH<sub>2</sub>)<sub>q</sub>- and -(CH<sub>2</sub>)<sub>t</sub>- moieties of the foregoing R⁵ groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and

25 heterocyclic moieties of the foregoing R⁵ groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁶C(O)R⁷, -C(O)NR⁶R⁷, -(CH<sub>2</sub>)<sub>j</sub>NR⁶R⁷, -SO<sub>2</sub>R⁶, -SO<sub>2</sub>NR⁶R⁷, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>j</sub>O(CH<sub>2</sub>)<sub>q</sub>OR⁹, and -(CH<sub>2</sub>)<sub>j</sub>OR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

30 each R⁶ and R⁷ is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>j</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>j</sub>O(CH<sub>2</sub>)<sub>q</sub>OR⁹, and -(CH<sub>2</sub>)<sub>j</sub>OR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R⁶ and R⁷ groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁹C(O)R<sup>10</sup>,

35 -C(O)NR⁹R<sup>10</sup>, -NR⁹R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>j</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>j</sub>(5 to 10 membered

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- 5 heterocyclic),  $-(\text{CH}_2)_t\text{O}(\text{CH}_2)_q\text{OR}^9$ , and  $-(\text{CH}_2)_t\text{OR}^9$ , wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, with the proviso that where  $\text{R}^6$  and  $\text{R}^7$  are both attached to the same nitrogen, then  $\text{R}^6$  and  $\text{R}^7$  are not both bonded to the nitrogen directly through an oxygen;  
each  $\text{R}^8$  is independently selected from H,  $\text{C}_1\text{-}\text{C}_{10}$  alkyl,  $-(\text{CH}_2)_t(\text{C}_6\text{-}\text{C}_{10}$  aryl), and  $-(\text{CH}_2)_t(5$  to 10 membered heterocyclic), wherein t is an integer from 0 to 6;
- 10 each  $\text{R}^9$  and  $\text{R}^{10}$  is independently selected from H and  $\text{C}_1\text{-}\text{C}_6$  alkyl;  
 $\text{R}^{11}$  is  $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{13}$ ,  $-(\text{CH}_2)_t\text{NR}^{12}\text{R}^{13}$ ,  $-\text{NR}^{12}\text{C}(=\text{O})\text{R}^{13}$ ,  $-\text{SO}_2\text{R}^{12}$ ,  $-\text{SO}_2\text{NR}^{12}\text{R}^{13}$ ,  $-\text{NR}^9\text{SO}_2\text{R}^{12}$ ,  $-\text{NR}^9\text{SO}_2\text{NR}^{12}\text{R}^{13}$ ,  $-\text{C}(\text{N}-\text{OR}^{12})\text{R}^{13}$ ,  $-\text{C}(\text{=NR}^{12})\text{R}^{13}$ ,  $-\text{NR}^9\text{C}(\text{=NR}^{12})\text{R}^{13}$ ,  $-\text{C}(\text{=NR}^{12})\text{NR}^9\text{R}^{13}$ ,  $-\text{NR}^9\text{C}(\text{=NR}^{12})\text{NR}^9\text{R}^{13}$ ,  $-\text{C}(\text{O})\text{R}^{12}$  and  $-\text{CO}_2\text{R}^{12}$  and wherein each  $\text{R}^{12}$  and  $\text{R}^{13}$  is independently selected from H,  $\text{C}_1\text{-}\text{C}_6$  alkyl,  $-(\text{CH}_2)_t(\text{C}_3\text{-}\text{C}_{10}$  cycloalkyl),  $-(\text{CH}_2)_t(\text{C}_6\text{-}\text{C}_{10}$  aryl),  $-(\text{CH}_2)_t(5$  to 10 membered heterocyclic),  $-(\text{CH}_2)_t\text{O}(\text{CH}_2)_q\text{OR}^9$ ,  $-(\text{CH}_2)_t\text{OR}^9$ , wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing  $\text{R}^{12}$  and  $\text{R}^{13}$  groups are optionally substituted by 1 to 3 substituents independently selected from  $\text{R}^5$  or  $\text{R}^{12}$  and  $\text{R}^{13}$  taken together with the nitrogen to which they are attached to form a  $\text{C}_5\text{-}\text{C}_9$  azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring, wherein said  $\text{C}_5\text{-}\text{C}_9$  azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring are optionally substituted by 1 to 5  $\text{R}^5$  substituents, with the proviso  $\text{R}^{12}$  and  $\text{R}^{13}$  are not both bonded to the nitrogen directly through an oxygen.
- 15 2. The compound of claim 1, wherein  $\text{R}^{11}$  is  $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{13}$ ,  $-\text{SO}_2\text{R}^{12}$ ,  $-\text{SO}_2\text{NR}^{12}\text{R}^{13}$ ,  $-\text{C}(\text{=N-OR}^{12})\text{R}^{13}$ , and  $-\text{C}(\text{=NR}^{12})\text{R}^{13}$  wherein each  $\text{R}^{12}$  and  $\text{R}^{13}$  is independently selected from H,  $\text{C}_1\text{-}\text{C}_6$  alkyl,  $-(\text{CH}_2)_t\text{OR}^9$ , wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing  $\text{R}^{12}$  and  $\text{R}^{13}$  groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl,  $-\text{C}(\text{O})\text{R}^8$ ,  $-\text{NR}^9\text{C}(\text{O})\text{R}^{10}$ ,
- 20  $-\text{C}(\text{O})\text{NR}^9\text{R}^{10}$ ,  $-\text{NR}^9\text{R}^{10}$ ,  $\text{C}_1\text{-}\text{C}_6$  alkyl,  $-(\text{CH}_2)_t(\text{C}_6\text{-}\text{C}_{10}$  aryl),  $-(\text{CH}_2)_t(5$  to 10 membered heterocyclic),  $-(\text{CH}_2)_t\text{O}(\text{CH}_2)_q\text{OR}^9$ , and  $-(\text{CH}_2)_t\text{OR}^9$ , wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or  $\text{R}^{12}$  and  $\text{R}^{13}$  may be taken together with the nitrogen to which they are attached to form a  $\text{C}_5\text{-}\text{C}_9$  azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said  $\text{C}_5\text{-}\text{C}_9$  azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5  $\text{R}^5$  substituents, with the proviso  $\text{R}^{12}$  and  $\text{R}^{13}$  are not both bonded to the nitrogen directly through an oxygen.
- 25 3. The compound of claim 2, wherein  $\text{R}^{11}$  is  $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{13}$ , wherein each  $\text{R}^{12}$  and  $\text{R}^{13}$  is independently selected from H,  $\text{C}_1\text{-}\text{C}_6$  alkyl,  $-(\text{CH}_2)_t\text{OR}^9$ , wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing  $\text{R}^{12}$  and  $\text{R}^{13}$  groups is optionally substituted by 1 to 3

5    substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>,  
-C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered  
heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is  
an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they  
are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl,  
10    piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl,  
pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup>  
substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through  
an oxygen.

9  
15    4.    The compound of claim 3, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and  
R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, wherein t is an integer from 0 to 6, and the  
alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents  
independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>,  
-C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered  
heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is  
20    an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they  
are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl,  
piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl,  
pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup>  
substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through  
25    an oxygen.

5.    The compound of claim 4, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl,  
azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub>  
azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are  
30    optionally substituted by 1 to 5 R<sup>5</sup> substituents.

6.    The compound of claim 5, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl,  
azetidinyl, or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, or  
pyrrolidinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

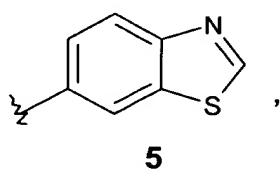
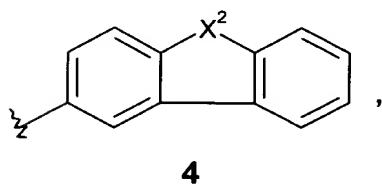
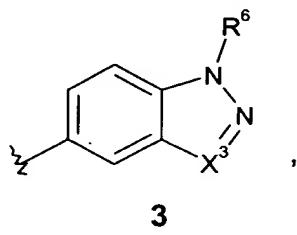
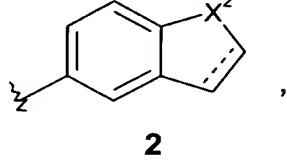
35    7.    The compound of claim 6, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic,  
azetidinyl or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring is  
optionally substituted by 1 to 5 R<sup>5</sup> substituents.

5        8.        The compound of claim 7, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic ring, wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

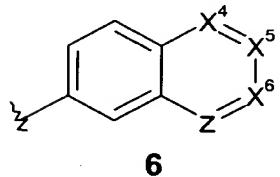
9        9.        The compound of claim 7, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached to form an azetidinyl ring, wherein 10      said azetidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

10      10.      The compound of claim 7, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached to form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

11.      The compound of claim 1, wherein R<sup>2</sup> is a group of the formula



or



15      wherein X<sup>2</sup> is -S-, -N(R<sup>6</sup>)- or O, and X<sup>3</sup>, X<sup>4</sup>, X<sup>5</sup>, X<sup>6</sup>, and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R<sup>2</sup> groups of formulas 2, 4 and 6 are optionally substituted by 1 to 5 R<sup>5</sup> substituents and the R<sup>2</sup> groups of formulas 3 and 5 are optionally substituted by 1 to 3 R<sup>5</sup> substituents.

20      12.      The compound of claim 11, wherein said R<sup>2</sup> group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

13.      The compound of claim 1, wherein said compound is selected from the group consisting of:

- 5        7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-pyridin-3-ylmethyl-amide;  
            Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
            [7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;  
            7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-  
10      methyl-amide;  
            (2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
            7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-  
morpholin-4-yl-ethyl)-amide;  
15      N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-  
yl}-acetamide;  
            N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
pyrrolidin-3-yl}-acetamide;  
            (3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-  
2-yl]-methanone;  
            (3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
            (6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
25      (3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
            (2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
            (3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
30      methanone;  
            (2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
            (3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
35      (3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
            N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
pyrrolidin-3-yl}-acetamide;

5           cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-  
2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds;  
solvates of said compounds; and prodrugs of said compounds.

14.       The compound of claim 13, wherein said compound is selected from the group  
consisting of

10           (2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;

(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
pyrrolidin-3-yl}-acetamide;

(3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;

(+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-  
carbonyl]-pyrrolidin-3-yl}-acetamide;

(2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;

(3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-  
2-yl]-methanone;

(3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-  
2-yl]-methanone;

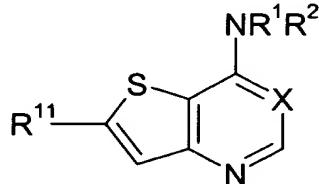
(+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;

6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;

(3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-  
2-yl]-methanone; pharmaceutically acceptable salts of said compounds; solvates of said

30         compounds; and prodrugs of said compounds.

15. A compound of the formula 1



1

or a pharmaceutically acceptable salt, prodrug or hydrate thereof,

X is N, CH or C(CN);

35         R¹ is H or C<sub>1</sub>-C<sub>6</sub> alkyl;

5        R<sup>2</sup> is 5 to 13 membered heterocyclic, wherein said R<sup>2</sup> group is optionally substituted by 1 to 5 R<sup>5</sup> substituents,

each R<sup>5</sup> is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -C(O)NR<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>R<sup>7</sup>, -OR<sup>9</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -SO<sub>2</sub>R<sup>6</sup>, -NR<sup>6</sup>SO<sub>2</sub>R<sup>7</sup>, -NR<sup>6</sup>SO<sub>2</sub>NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, -(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>q</sub>NR<sup>6</sup>R<sup>7</sup>, 10 -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, -S(O)<sub>j</sub>(C<sub>1</sub>-C<sub>6</sub> alkyl), -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>(5 to 10 membered heterocyclic), -C(O)(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>(CH<sub>2</sub>)<sub>q</sub>NR<sup>6</sup>R<sup>7</sup>, -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>CH<sub>2</sub>C(O)NR<sup>6</sup>R<sup>7</sup>, 15 -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>(CH<sub>2</sub>)<sub>q</sub>NR<sup>9</sup>C(O)R<sup>8</sup>, -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>(CH<sub>2</sub>)<sub>q</sub>S(O)<sub>j</sub>(C<sub>1</sub>-C<sub>6</sub> alkyl), -(CH<sub>2</sub>)<sub>t</sub>NR<sup>7</sup>(CH<sub>2</sub>)<sub>t</sub>R<sup>6</sup>, -SO<sub>2</sub>(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), and -SO<sub>2</sub>(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the -(CH<sub>2</sub>)<sub>q</sub>- and -(CH<sub>2</sub>)<sub>t</sub>- moieties of the foregoing R<sup>5</sup> groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R<sup>5</sup> groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -C(O)NR<sup>6</sup>R<sup>7</sup>, -(CH<sub>2</sub>)<sub>t</sub>NR<sup>6</sup>R<sup>7</sup>, -SO<sub>2</sub>R<sup>6</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

each R<sup>6</sup> and R<sup>7</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

25        each R<sup>6</sup> and R<sup>7</sup> groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R<sup>6</sup> and R<sup>7</sup> groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6; 30        an integer from 2 to 6, with the proviso that where R<sup>6</sup> and R<sup>7</sup> are both attached to the same nitrogen, then R<sup>6</sup> and R<sup>7</sup> are not both bonded to the nitrogen directly through an oxygen;

each R<sup>8</sup> is independently selected from H, C<sub>1</sub>-C<sub>10</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), and -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), wherein t is an integer from 0 to 6;

each R<sup>9</sup> and R<sup>10</sup> is independently selected from H and C<sub>1</sub>-C<sub>6</sub> alkyl;

35        R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, -(CH<sub>2</sub>)<sub>t</sub>NR<sup>12</sup>R<sup>13</sup>, -NR<sup>12</sup>C(=O)R<sup>13</sup>, -SO<sub>2</sub>R<sup>12</sup>, -SO<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, -NR<sup>9</sup>SO<sub>2</sub>R<sup>12</sup>, -NR<sup>9</sup>SO<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, -C(=N-OR<sup>12</sup>)R<sup>13</sup>, -C(=NR<sup>12</sup>)R<sup>13</sup>, -NR<sup>9</sup>C(=NR<sup>12</sup>)R<sup>13</sup>, -C(=NR<sup>12</sup>)NR<sup>9</sup>R<sup>13</sup>, -NR<sup>9</sup>C(=NR<sup>12</sup>)NR<sup>9</sup>R<sup>13</sup>, -C(O)R<sup>12</sup> and -CO<sub>2</sub>R<sup>12</sup> and wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>3</sub>-C<sub>10</sub> cycloalkyl), -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties

5 of the foregoing R<sup>12</sup> and R<sup>13</sup> groups are optionally substituted by 1 to 3 substituents independently selected from R<sup>5</sup> or R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring, wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

16. The compound of claim 15, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, -SO<sub>2</sub>R<sup>12</sup>, -SO<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, -C(=N-OR<sup>12</sup>)R<sup>13</sup>, and -C(=NR<sup>12</sup>)R<sup>13</sup> wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

17. The compound of claim 16, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

18. The compound of claim 17, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3

5 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>,  
-C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered  
heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is  
an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they  
are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl,  
10 piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl,  
pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup>  
substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through  
an oxygen.

15 19. The compound of claim 18, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl,  
azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub>  
azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are  
optionally substituted by 1 to 5 R<sup>5</sup> substituents.

20 20. The compound of claim 19, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl,  
azetidinyl, or pyrrolidinyl ring, wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl,  
or pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

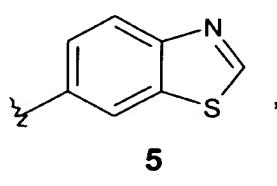
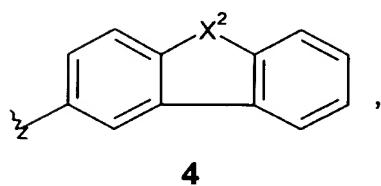
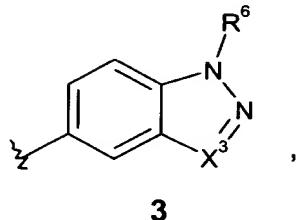
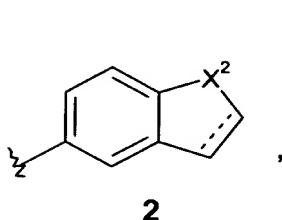
25 21. The compound of claim 20, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl  
or pyrrolidinyl ring, wherein said a C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring is optionally  
substituted by 1 to 5 R<sup>5</sup> substituents.

22. The compound of claim 21, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic ring,  
wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

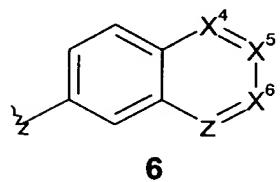
30 23. The compound of claim 21, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form an azetidinyl ring, wherein  
said azetidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

35 24. The compound of claim 21, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup>  
taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein  
said pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

5        25.      The compound of claim 21, wherein R<sup>2</sup> is a group of the formula



or



wherein X<sup>2</sup> is -S-, -N(R<sup>6</sup>)- or O, and X<sup>3</sup>, X<sup>4</sup>, X<sup>5</sup>, X<sup>6</sup>, and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R<sup>2</sup> groups of formulas 2, 4 and 6  
10 are optionally substituted by 1 to 5 R<sup>5</sup> substituents and the R<sup>2</sup> groups of formulas 3 and 5 are  
optionally substituted by 1 to 3 R<sup>5</sup> substituents.

26.      The compound of claim 24, wherein said R<sup>2</sup> group is a group of formula 2 or 6,  
wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

27.      The compound of claim 15, wherein said compound is selected from the group  
15 consisting of:

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-pyridin-3-ylmethyl-amide;

Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;

20      7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide;

(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

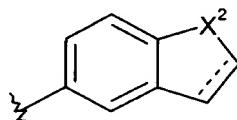
- 5        7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-yl-ethyl)-amide;  
N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;  
N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
10      pyrrolidin-3-yl}-acetamide;  
(3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
15      (6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
20      b]pyridin-2-yl]-methanone;  
(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
25      (3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
(3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-  
methanone;  
N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
30      pyrrolidin-3-yl}-acetamide;  
cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; solvates of said compounds; and prodrugs of said compounds.

28.      The compound of claim 27, wherein said compound is selected from the group  
35      consisting of

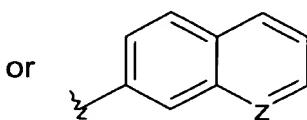
- (2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-  
b]pyridin-2-yl]-methanone;  
(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-  
pyrrolidin-3-yl}-acetamide;

- 5 (3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
(+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;  
(2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
10 (3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
(3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
15 (+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;  
6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;  
20 (3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; solvates of said compounds; and prodrugs of said compounds.

29. A compound of claim 1, wherein X is CH; Y is N; R<sup>1</sup> is H; R<sup>2</sup> is



2



6

X<sup>2</sup> is -N(R<sup>6</sup>)-, the dashed line in formula 2 represents an optional double bond, Z is CH or N and the above R<sup>2</sup> group of formulas 2 and 6 are optionally substituted by 1 to 5 R<sup>5</sup>.

30. The compound of claim 29, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, -SO<sub>2</sub>R<sup>12</sup>, -SO<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, -C(=N-OR<sup>12</sup>)R<sup>13</sup>, and -C(=NR<sup>12</sup>)R<sup>13</sup> wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup>

5 substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

31. The compound of claim 30, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

32. The compound of claim 31, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

33. The compound of claim 32, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

34. The compound of claim 33, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

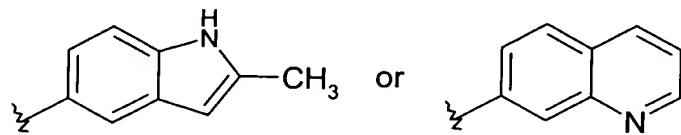
5        35. The compound of claim 34, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

10      36. The compound of claim 35, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

15      37. The compound of claim 36, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form an azetidinyl ring wherein said azetidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

20      38. The compound of claim 37, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a pyrrolidinyl ring wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

25      39. A compound of claim 1, wherein X is CH; Y is N; R<sup>1</sup> is H; R<sup>2</sup> is



30      40. The compound of claim 39, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, -SO<sub>2</sub>R<sup>12</sup>, -SO<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, -C(=N-OR<sup>12</sup>)R<sup>13</sup>, and -C(=NR<sup>12</sup>)R<sup>13</sup> wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>t</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

35      41. The compound of claim 40, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>,

5    -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, 10 azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

42.    The compound of claim 41, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup>, wherein each R<sup>12</sup> and R<sup>13</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R<sup>12</sup> and R<sup>13</sup> groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R<sup>8</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -C(O)NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl, -(CH<sub>2</sub>)<sub>t</sub>(C<sub>6</sub>-C<sub>10</sub> aryl), -(CH<sub>2</sub>)<sub>t</sub>(5 to 10 membered heterocyclic), -(CH<sub>2</sub>)<sub>q</sub>O(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, and -(CH<sub>2</sub>)<sub>t</sub>OR<sup>9</sup>, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R<sup>12</sup> and R<sup>13</sup> may be taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents, with the proviso R<sup>12</sup> and R<sup>13</sup> are not both bonded to the nitrogen directly through an oxygen.

25    43.    The compound of claim 42, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached to form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

30    44.    The compound of claim 43, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, aziridinyl, azetidinyl, and pyrrolidinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

35    45.    The compound of claim 44, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic, azetidinyl or pyrrolidinyl ring are optionally substituted by 1 to 5 R<sup>5</sup> substituents.

40    46.    The compound of claim 45, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a C<sub>5</sub>-C<sub>9</sub> azabicyclic ring, wherein said C<sub>5</sub>-C<sub>9</sub> azabicyclic ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

5        47.      The compound of claim 46, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form an azetidinyl ring, wherein said azetidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

10       48.      The compound of claim 47, wherein R<sup>11</sup> is -C(O)NR<sup>12</sup>R<sup>13</sup> wherein R<sup>12</sup> and R<sup>13</sup> taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R<sup>5</sup> substituents.

49.      A pharmaceutical composition for the treatment of a hyperproliferative disorder in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

50.      The pharmaceutical composition of claim 49, wherein said hyperproliferative disorder is cancer.

51.      The pharmaceutical composition of claim 50, wherein said cancer is brain, lung, kidney, renal, ovarian, squamous cell, bladder, gastric, pancreatic, breast, head, neck, oesophageal, gynecological, prostate, colorectal or thyroid cancer.

52.      The pharmaceutical composition of claim 49, wherein said hyperproliferative disorder is noncancerous.

53.      The pharmaceutical composition of claim 52, wherein said disorder is a benign hyperplasia of the skin or prostate.

54.      A pharmaceutical composition for the treatment of a hyperproliferative disorder in a mammal which comprises a therapeutically effective amount of a compound of claim 1 in combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, and anti-androgens, and a pharmaceutically acceptable carrier.

55.      A pharmaceutical composition for the treatment of pancreatitis or kidney disease in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

56.      A pharmaceutical composition for the blastocyte implantation in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

57.      A pharmaceutical composition for treating a disease related to vasculogenesis or angiogenesis in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

58.      The pharmaceutical composition of claim 57, wherein said disease is selected from the group consisting of tumor angiogenesis, chronic inflammatory disease such as rheumatoid arthritis, atherosclerosis, skin diseases such as psoriasis, excema, and scleroderma,

5 diabetes, diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer.

59. A method of treating a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

10 60. The method of claim 59 wherein said hyperproliferative disorder is cancer.

61. The method of claim 60 wherein said cancer is brain, lung, squamous cell, renal, kidney, ovarian, bladder, gastric, pancreatic, breast, head, neck, oesophageal, prostate, colorectal, gynecological or thyroid cancer.

62. The method of claim 60 wherein said hyperproliferative disorder is noncancerous.

63. The method of claim 62 wherein said disorder is a benign hyperplasia of the skin or prostate.

64. A method for the treatment of a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1 in combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, and anti-androgens.

65. A method of treating pancreatitis or kidney disease in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

66. A method of preventing blastocyte implantation in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

67. A method for treating a disease related to vasculogenesis or angiogenesis in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

68. The method of claim 67, wherein said disease is selected from the group consisting of tumor angiogenesis, chronic inflammatory disease such as rheumatoid arthritis, atherosclerosis, skin diseases such as psoriasis, excema, and scleroderma, diabetes, 35 diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer.